THE LOWER FOX RIVER



Twelfth Annual

Watershed Symposium

Tuesday, April 14, 2015

 $\frac{\text{University of Wisconsin}}{GREEN BAY}$

University Union Phoenix Rooms

www.uwgb.edu/watershed/

Agenda

2015 Watershed Symposium Tuesday, April 14 UW-Green Bay Campus University Union Phoenix Rooms

- 8:30 **Registration** (Outside Phoenix B)
- 8:45 Welcome & Introductions (Phoenix B)

Dr. Kevin Fermanich, Natural & Applied Sciences, and **Whitney Passint**, Cofrin Center for Biodiversity, UW-Green Bay

"History of the Fox River" **GPS Education Partners** (Phoenix B) Students from GPS have worked with the UW-Green Bay Archives to research the history of the Fox River. Their talk will illustrate the impact that humans have had on the Fox River over the course of history.

- GPS Education Partners
- Teacher: Stefanie Stainton
- 9:15 10:00 Keynote Presentation "Cat Island Chain Restoration Project" (Phoenix B)

Tom Prestby, Jesse Weinzinger and Chelsea Gunther UW-Green Bay, Environmental Science & Policy Graduate Program

These three students research the ecological impacts of the Cat Island Restoration Project. Jesse and Chelsea are involved with monitoring aquatic plant species. Tom studies migratory shorebirds and their use of the island chain as a stop-over site during spring and fall migration.

10:00-10:10 Break

9:00

10:10 – 10:50 Student Presentations – Watershed Research Projects (Phoenix B) Moderator: Whitney Passint, UW-Green Bay

Program partners:

- Appleton East High School
- Appleton North High School
- Ashwaubenon High School
- GPS Education Partners
- Green Bay East High School
- Green Bay Preble High School
- Green Bay Southwest High School
- Luxemburg-Casco High School
- Oneida Nation High School
- Oshkosh North High School
- Pulaski High School
- West De Pere High School

Windward Prospects Ltd. (formerly Arjo Wiggins Appleton Ltd) has had a vital role in the development and success of the Lower Fox River Watershed Monitoring Program and the Watershed Symposium.



This year we would like to extend our gratitude to Bob and Tom Atwell from Nicolet National Bank for their generous gift that has helped fund the program and for their continued support as champions of water quality. They are truly an asset to the Green Bay community.

Thank you to Cellcom for their "Green Gift," which has been dedicated to funding the equipment necessary to keep our program operating. Your support is greatly appreciated!



A special thank you to the 1923 Fund for their generous contribution to LFRWMP and for helping extend the educational experience to students across the country.

The Lower Fox River Watershed Monitoring Program is coordinated and administered by staff from the UW-Green Bay Department of Natural and Applied Sciences and the Cofrin Center for Biodiversity.





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Keynote Speakers: Chelsea Gunther, Jesse Weinzinger, & Tom Prestby



Chelsea, Jesse, and Tom are all graduate students at the University of Wisconsin-Green Bay and pursuing their master's degree in Environmental Science and Policy. All three students have participated in a number of university funded conservation projects including the Great Lakes Coastal Wetland Monitoring Project, where they have traveled to different locations around Lake Huron and Lake Michigan to conduct amphibian and bird surveys. They have also worked at the Wabikon Lake Forest Dynamics Plot in Chequamegon-Nicolet National Forest, which is part of a global network of forest research plots dedicated to increasing scientific knowledge of forest ecosystems.

Today's talk will introduce you to the Cat Island Chain Restoration Project and the exciting and innovative work conducted by these three students and the university. Jesse and Chelsea are working on an ongoing project to monitor the impacts of restoring the Cat Island Chain in Lower Green Bay on aquatic plant diversity. This past summer was the third field season for this project. Tom is a bird specialist whose thesis work involves monitoring the impacts of the restoration project on migratory shorebird habitat. After two years of monitoring the spring and fall migratory seasons, the preliminary results suggest that this project has had positive implications on a wide range of bird species and will continue to provide necessary stop-over habitat for migratory birds.

10:10 "Website for Green Bay Southwest" Duck Creek Team

Students from Green Bay Southwest have created a website for their science club that showcases their involvement with LFRWMP.

- Green Bay Southwest
- Teachers: Lynn Terrien & Rick Berken

10:20 *"Public Awareness"* Trout Creek Team

Students from Pulaski High School have created videos that demonstrate the importance of public awareness on issues such as nutrient pollution, dead zones, PCB clean-up, and Northern Pike restoration.

- Pulaski High School & Oneida Nation High School
- Teacher: Allison Thut & Becky Nutt

10:30 *"Nitrates by the Stream"* Spring Brook Team

Students from Oshkosh North have investigated the cause of high nitrate levels in their stream. As part of their work they have contacted landowners near the stream to identify potential sources.

- Oshkosh North High School
- Teachers: Barb Reed & Mark Lieffring
- 10:40 *"Frogs: Their Importance and Why We Monitor"* Jermaine Toliver-Marx: Ashwaubenon Creek An introduction to frogs and their importance to watershed ecosystems.
 - Green Bay East High School
 - Teacher: Rich Krieg

10:50

Student Poster Session & UW-Green Bay Student Organizations (Phoenix C)

NEW Addition to the Poster Session

Make sure to check out the UW-Green Bay student organizations! Learn about the unique opportunities available to UWGB students and fun ways you can get involved with environmental projects here in the Green Bay community!

11:30 Lunch (Phoenix B and C)

12:00 -2:30 Rotating sessions (A, B, C, D)

(A) Quiz Bowl: (Phoenix A)

Test your watershed knowledge and monitoring techniques with Charlie! Teams will battle each other for fun science prizes!

(B) Frog Monitoring: (Phoenix B & C)

Learn the frog monitoring techniques used in the field. This learning activity has been designed by Erin Giese, the Cofrin Center for Biodiversity, and the Great Lakes Coastal Monitoring Program.

(C) Tour: Richter Museum

The Richter Museum of Natural History contains one of Wisconsin's most significant collections of animal specimens for scientific research and education. The Museum ranks among the 10 largest oological (egg) collections in North America. Tours given by museum curator, Tom Erdman.

(D) Tour: Herbarium, Cofrin Center for Biodiversity

An herbarium is an scientific collection of dried plant specimens called vouchers. The UW-Green Bay Herbarium houses a collection of approximately 35,000 vouchers. Kathryn Corio will provide insight on the work done here at UW-Green Bay.

2:30 Wrap up and dismissal

Student Research Poster and Video Display Topics:

"Effects of Water Quality Indicators on Fish Reproduction" Dutchman's Creek Team Ashwaubenon High School

Teachers: Dan Albrent & Dan Newel

The Dutchman's Creek monitoring team researched water quality indicators associated with healthy fish populations. The team used their water quality data to try and explain the lack of fish biodiversity at their site.

"Restoration Projects and Their Impact at Trout Creek" Trout Creek Team

Oneida Nation High School & Pulaski High School Teachers: Becky Nutt & Allison Thut

Students from Oneida Nation and Pulaski High have worked together to address the impacts of the restoration project at Trout Creek. The students discuss past observations regarding stream flow and water quality and apply their knowledge of watershed restoration to predict what changes might occur due to this project.

"The Ashwaubenon Creek Watershed" Ashwaubenon Creek Team

West De Pere High School Environmental Science Classes Teacher: Dana Lex

Students from West De Pere showcase their work over the past year. Their primary focus looks at the biotic index of macroinvertebrates and how their stream has changed over time, as well as seasonal changes.

"Nitrates by the Stream" Spring Brook Team Oshkosh North High School Teachers: Barb Reed & Mark Lieffring

Oshkosh North students have investigated the cause of high nitrate levels in Spring Brook. In order to get a more complete understanding of the issue, the students have reached out to landowners as part of their research.

"Nutrient Data for Ashwaubenon Creek" & "Frog Species of Ashwaubenon Creek" Green Bay East HS Teacher: Rich Krieg

Students analyzed phosphorus, ammonia, and nitrate data collected at two sites at Ashwaubenon Creek since 2006. Data will be compared to other area streams. Our second poster presents frog monitoring data in terms of species and trends over time. It also includes projections for the future.